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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,756	03/15/2004	Shunpei Yamazaki	12732-217001	9081

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EXAMINER
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TRAN, MY CHAU T

ART UNIT	PAPER NUMBER
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2629

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/15/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/799,756	YAMAZAKI ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	MY-CHAU T. TRAN	2629	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 February 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) 11-20 and 30-47 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 21-26 is/are rejected.
- 7) ☒ Claim(s) 27-29 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>See Office Action</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Application and Claims Status*

1. Applicant's response filed 02/15/2007 are acknowledged and entered. Claims 1-47 are currently pending and are under consideration in this Office Action.

### *Election/Restrictions*

2. Applicant's election without traverse of Group I (Claims 1-10 and 21-29) in the reply filed on 02/15/2007 is acknowledged.
3. Claims 11-20 and 30-47 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to *nonelected inventions*, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 02/15/2007.

### *Priority*

4. Receipt is acknowledged of papers, (i.e. Japan Application No. 2003-105923, filed April 9, 2003; and Japan Application No. 2003-108484, filed April 11, 2003), submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Information Disclosure Statement*

5. The information disclosure statements (IDS) filed on 03/15/2004, 07/30/2004, 09/27/2004, and 05/31/2006 have been reviewed, and the references that have been considered are initialed as recorded in PTO-1449 form(s).

***Claim Objections***

6. Claim 8 is objected to because of the following informalities: The term “range” is misspelled. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1, 4, 21, and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Antila et al. (US Patent 6,583,770 B1).

For ***claims 1, 4, and 21***, Antila et al. disclose a two-sided display device (see e.g. Abstract; col. 1, lines 6-11; col. 2, line 58 thru col. 3, line 11; fig. 5). As illustrated in figure 4(b), the device comprises an electroluminescence film (ref. #45)(refers to instant claimed light transmissive substrate), electrodes (ref. #43 and 47)(refers to instant claimed light emitting elements), a first display (ref. #D1)(refers to instant claimed first display surface), a second display (ref. #D2) (refers to instant claimed second display surface), and a display driver circuit (ref. #41)(see e.g. col. 6, line 41 thru col. 7, line 14). The first display is on one side of the electroluminescence film and the second display on the other side of the electroluminescence

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film (see e.g. col. 2, lines 61-65; col. 6, lines 41 thru col. 7, line 14; fig. 4b). As illustrated in figure 5, one display (i.e. ref. #150) is larger than the apposing display (i.e. ref. #110). The display driver circuit drives the pixels of the displays such that light is direct upward in the first display and light is directed downward in the second display (see e.g. col. 6, line 65 thru col. 7, line 8; fig. 4b)(refers to instant claim 4).

For *claim 25*, Antila et al. disclose that the device is telecommunication device (see e.g. col. 7, lines 15-65; fig. 5).

Therefore, the device of Antila et al. does anticipate the instant claimed invention.

9. Claims 1, 4-6, 9, 10, 21, and 26 are rejected under 35 U.S.C. 102(e) as anticipated by Kishi (US Patent 6,819,309 B1).

For *claims 1 and 21*, Kishi discloses a double-faced display device (see e.g. Abstract; col. 2, lines 66-67; fig. 1). As illustrated in figure 1, the device comprises a intermediate substrate (ref. #2)(refers to instant claimed light transmissive substrate), a first display surface (ref. #1), a second display surface (ref. #2), electrodes (ref. # 4 and 5)(refers to instant claimed light emitting elements), and switching devices (ref. #6 and 7)(see e.g. col. 3, lines 1-20; col. 4, lines 14-34). Although Kishi does not disclose the claimed feature that the first display screen is larger than the second display screen, this feature constitute obvious variations in parameters, which are routinely modified in the art and have not been described as critical to the practice of the invention.

For *claims 4-6, 9, and 26*, Kishi discloses that the device comprises a scanning electrode drive circuit and a common data electrode drive circuit that are connected to the switching

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devices wherein the a scanning electrode drive circuit and the common data electrode drive circuit drive the image data to be display on either the first display surface or the second display surface using the switching devices (see e.g. col. 5, lines 22-52; col. 9, lines 6-34; figs. 4 and 8). The device comprises charge storage device (refers to instant claimed volatile storage)(see e.g. col. 6, lines 9-25).

For *claim 10*, Kishi discloses that the first display surface and the second display surface comprise ITO film (see e.g. col. 8, lines 61-65; fig. 1), which is interpreted as a photoelectric converter as evidence by Takada et al. (see e.g. col. 1, lines 9-22).

Therefore, the device of Kishi does anticipate the instant claimed invention.

10. Claims 1, 3, and 21-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Anzai et al. (US

The applied reference has a common inventor, i.e. Shunpei Yamazaki, with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

For *claims 1 and 21*, Anzai et al. disclose a portable information device (see e.g. Abstract; paragraph: [0001] and [0187]). The device comprises a double-sided display panel having a first screen on one side of a substrate and a second screen on the opposite side of the same substrate wherein each screen display in apposing direction (see e.g. paragraph: [0006],

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[0010], [0021], [0027], [0034], [0042], [0047], [0052], [0059], [0066], [0074], and [0119]; fig. 10). The substrate comprises light-emitting elements for each screen (see e.g. paragraph: [0008], [0012], [0017]-[0019], [0023]-[0025], [0029]-[0031], [0036]-[0038], [0044], [0049], [0054], [0061], [0068], and [0076]; fig. 5). As illustrated in figure 5(B), one display area is larger than the other display area suggesting that one display screen is larger than the other display screen (see e.g. paragraph: [0020], [0032], [0142], and [0147]).

For *claim 3*, Anzai et al. disclose that the light-emitting elements are multicolor (see e.g. paragraph: [0049], [0054], [0061], [0068], [0076], and [0158]).

For *claims 22-25*, Anzai et al. disclose that the portable information device can be a mobile computer, video cameras, digital cameras, or mobile telephones (see e.g. paragraph: [0187]).

Therefore, the apparatus of Anzai et al. does anticipate the instant claimed invention.

### ***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

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the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. Claims 1-4, 21, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Antila et al. (US Patent 6,583,770 B1) in view of Terada et al. (US Patent 6,280,559 B1).

For *claims 1, 4, and 21*, Antila et al. disclose a two-sided display device (see e.g. Abstract; col. 1, lines 6-11; col. 2, line 58 thru col. 3, line 11; fig. 5). As illustrated in figure 4(b), the device comprises an electroluminescence film (ref. #45)(refers to instant claimed light transmissive substrate), electrodes (ref. #43 and 47)(refers to instant claimed light emitting elements), a first display (ref. #D1)(refers to instant claimed first display surface), a second display (ref. #D2) (refers to instant claimed second display surface), and a display driver circuit (ref. #41)(see e.g. col. 6, line 41 thru col. 7, line 14). The first display is on one side of the electroluminescence film and the second display on the other side of the electroluminescence film (see e.g. col. 2, lines 61-65; col. 6, lines 41 thru col. 7, line 14; fig. 4b). As illustrated in figure 5, one display (i.e. ref. #150) is larger than the apposing display (i.e. ref. #110). The display driver circuit drives the pixels of the displays such that light is direct upward in the first display and light is directed downward in the second display (see e.g. col. 6, line 65 thru col. 7, line 8; fig. 4b)(refers to instant claim 4).

For *claim 25*, Antila et al. disclose that the device is telecommunication device (see e.g. col. 7, lines 15-65; fig. 5).

The teachings of Antila et al. differ from the presently claimed invention as follows:



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For **claim 2**, Antila et al. fail to disclose that the light emitting elements emit white light and a color filter is provided over the substrate.

For **claim 3**, Antila et al. fail to disclose that the light emitting elements emit different colored lights.

However, Terada et al. teach the limitations that are deficient in Antila et al. as follows:

For **claims 2 and 3**, Terada et al. disclose that it is well known in the art of EL (electroluminescent) display apparatus to use light emitting elements that emit different colored lights or light emitting elements emit white light and color filters in order to produce color display (see e.g. col. 1, line 39 thru col. 2, line 4)

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to disclose using light emitting elements that emit different colored lights or light emitting elements emit white light and color filters as taught by Terada et al. in the device of Antila et al. One of ordinary skill in the art would have been motivated to disclose using light emitting elements that emit different colored lights or light emitting elements emit white light and color filters in the device of Antila et al. for the advantage of providing an EL display apparatus that produce color display. Furthermore, one of ordinary skill in the art would have a reasonable expectation of success in the combination of Antila et al. and Terada et al. because the type of light emitting elements use to produce color display would be a choice of experimental design and is considered within the purview of the cited prior art.

Therefore, the combine teachings of Antila et al. and Terada et al. do render the apparatus of the instant claims *prima facie* obvious.

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14. Claims 1, 4, 7, 8, 21, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Antila et al. (US Patent 6,583,770 B1) in view of Senbonmatsu (US Patent 7,034,451 B2; *filing date 08/20/2003*).

For **claims 1, 4, and 21**, Antila et al. disclose a two-sided display device (see e.g. Abstract; col. 1, lines 6-11; col. 2, line 58 thru col. 3, line 11; fig. 5). As illustrated in figure 4(b), the device comprises an electroluminescence film (ref. #45)(refers to instant claimed light transmissive substrate), electrodes (ref. #43 and 47)(refers to instant claimed light emitting elements), a first display (ref. #D1)(refers to instant claimed first display surface), a second display (ref. #D2) (refers to instant claimed second display surface), and a display driver circuit (ref. #41)(see e.g. col. 6, line 41 thru col. 7, line 14). The first display is on one side of the electroluminescence film and the second display on the other side of the electroluminescence film (see e.g. col. 2, lines 61-65; col. 6, lines 41 thru col. 7, line 14; fig. 4b). As illustrated in figure 5, one display (i.e. ref. #150) is larger than the apposing display (i.e. ref. #110). The display driver circuit drives the pixels of the displays such that light is direct upward in the first display and light is directed downward in the second display (see e.g. col. 6, line 65 thru col. 7, line 8; fig. 4b)(refers to instant claim 4).

For **claim 25**, Antila et al. disclose that the device is telecommunication device (see e.g. col. 7, lines 15-65; fig. 5).

The teachings of Antila et al. differ from the presently claimed invention as follows:

For **claim 7**, Antila et al. fail to disclose that the first display surface and the second display surface are sandwiched by two polarizers having different polarization directions

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For **claim 8**, Antila et al. fail to disclose that the crossing angle of the polarization directions is in the range of 45 to 90 degree.

However, Senbonmatsu teach the limitations that are deficient in Antila et al. as follows:

For **claims 7 and 8**, Senbonmatsu disclose a double-sided display with a first and second polarization layers (ref. #4 and 5) (see e.g. Abstract; col. 3, lines 3-7; col. 4, line 40 thru col. 5, line 4). As illustrated in figure 2, the first and second polarization layers sandwiched the first and second display surface (ref. #6 and 7)(see e.g. col. 8, lines 17-43). As illustrated in figures 9 and 10, the crossing angle of the polarization directions is in the range of 45 to 90 degree.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to disclose that the device comprises two polarizers that sandwiched the first and second display surface, and that the crossing angle of the polarization directions is in the range of 45 to 90 degree as taught by Senbonmatsu in the device of Antila et al. One of ordinary skill in the art would have been motivated to disclose that the device comprises two polarizers that sandwiched the first and second display surface, and that the crossing angle of the polarization directions is in the range of 45 to 90 degree in the device of Antila et al. for the advantage of providing a double-sided display device with high contrast (Senbonmatsu: col. 11, lines 1-7). Furthermore, one of ordinary skill in the art would have a reasonable expectation of success in the combination of Antila et al. and Senbonmatsu because Antila et al. suggest using polarizers for the device (Antila: col. 4, line 39 thru col. 5, line 5).

Therefore, the combine teachings of Antila et al. and Senbonmatsu do render the apparatus of the instant claims *prima facie* obvious.

### ***Double Patenting***

15. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

16. Claims 1-3, 21, 22, and 25 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 11, 12, 15-17, 20, 39, 42, 43, and 46 of copending Application No. 10/741,599 (US Patent Application Publication US 2004/0263425 A1; Now refers as Anzai et al.). Although the conflicting claims are not identical,

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they are not patentably distinct from each other because both the instant claimed device of claims 1-3, 21, 22, and 25 and the claimed device of Anzai et al. have similar structural features.

Specifically, the claimed device of Anzai et al. comprises a double-sided display panel having a first screen (refers to instant claimed first display surface) on one surface of a substrate and a second screen (refers to instant claimed second display surface) on the opposite surface of the one surface of the substrate, and multiple pixels wherein each of the multiple pixels comprises light-emitting elements (refers to instant claimed light emitting elements). Anzai et al. also claim that the pixel area of the first screen is different from the pixel area of the second screen, which suggests that the first screen is larger than the second screen. In claims 12 and 17 of Anzai et al., Anzai et al. claim that the light-emitting elements are monochrome light-emitting elements and the device further comprises a color filter (refers to instant claim 2). In claims 39 and 43 of Anzai et al., Anzai et al. claim that the light-emitting elements are multicolor (refers to instant claim 3). The device of Anzai et al. can be a computer, a mobile telephone, or a PDA (refers to instant claims 22 and 25).

That is the claimed device of the instant application is generic to the claimed device of copending Application No. 10/741,599 or in other word claims 1-3, 21, 22, and 25 are anticipated by claims 11, 12, 15-17, 20, 39, 42, 43, and 46 of copending Application No. 10/741,599. Accordingly, the examined claims would be obvious over the claims of copending Application No. 10/741,599.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Allowable Subject Matter***

17. Claims 27-29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

18. The prior arts made of record and not relied upon are considered pertinent to applicant's disclosure. They are Ujihara (US Patent 5,304,895), Forrest et al. (US Patent 5,703,436), and Yoneda et al. (US Patent 6,392,340 B2).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MY-CHAU T. TRAN whose telephone number is 571-272-0810. The examiner can normally be reached on Monday: 8:00-2:30; Tuesday-Thursday: 7:30-5:00; Friday: 8:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard A. Hjerpe can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

My-Chau T. Tran  
March 9, 2007



**RICHARD HJERPE**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**